

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method performed by an operating system, comprising:

establishing, within a global operating system environment provided by an operating system, a particular non-global partition which a plurality of non-global operating system partitions within a global operating system environment provided by the operating system, wherein each non-global operating system partition serves to isolate processes running within the particular that non-global operating system partition from other non-global operating system partitions within the global operating system environment, wherein enforcement of boundaries between the non-global operating system partitions is carried out by the operating system, and wherein the plurality of non-global operating system partitions comprises a particular non-global operating system partition;

associating the particular non-global operating system partition with a first resource pool comprising one or more resources; and

ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool.
2. (Original) The method of claim 1, wherein the first resource pool comprises one or more processors.
3. (Currently Amended) The method of claim 2, wherein ensuring comprises:

assigning work from processes running within the particular non-global operating system partition to only the one or more processors in the first resource pool.

4. (Original) The method of claim 1, wherein the first resource pool comprises an indication of a maximum amount of memory that can be consumed.
5. (Currently Amended) The method of claim 4, wherein ensuring comprises:
receiving, from a particular process running within the particular non-global operating system partition, a memory allocation request;
determining whether granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded; and
in response to a determination that granting the memory allocation request would not cause the maximum amount of memory that can be consumed to be exceeded, granting the memory allocation request.
6. (Original) The method of claim 5, wherein ensuring further comprises:
in response to a determination that granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded, deallocating sufficient memory from one or more other processes to enable the memory allocation request to be granted without causing the maximum amount of memory that can be consumed to be exceeded; and
granting the memory allocation request.
7. (Original) The method of claim 1, wherein the operating system is executed on a computer system, and wherein the resources in the first resource pool are just a subset of a total set of resources available on the computer system.

8. (Currently Amended) The method of claim 1, wherein ensuring comprises:
associating each process running within the particular non-global operating system partition with
the first resource pool.

9. (Currently Amended) The method of claim 8, further comprising:
receiving an indication that the particular non-global operating system partition is to be
associated with a second resource pool instead of the first resource pool, wherein the
second resource pool is different from the first resource pool, and wherein the second
resource pool comprises one or more resources;
associating the particular non-global operating system partition with the second resource pool
instead of the first resource pool; and
ensuring that processes running within the particular non-global operating system partition are
allowed to utilize only the resources in the second resource pool.

10. (Currently Amended) The method of claim 9, wherein ensuring that processes running
within the particular non-global operating system partition are allowed to utilize only the
resources in the second resource pool comprises:
associating each process running within the particular non-global operating system partition with
the second resource pool instead of the first resource pool.

11. (Currently Amended) The method of claim 1, wherein the operating system executes on a
computer system, and wherein the method further comprises:
receiving, from a particular process running within the particular non-global operating system
partition, a request for information pertaining to all resources; and

providing, to the particular process, information pertaining only to the one or more resources in the first resource pool, even though the computer system comprises other resources.

12. (Currently Amended) A machine-readable storage medium having stored thereon at least a portion of an operating system, the machine readable storage medium comprising: instructions for causing one or more processors to establish, within a global operating system environment provided by an operating system, a particular non-global partition which a plurality of non-global operating system partitions within a global operating system environment provided by the operating system, wherein each non-global operating system partition serves to isolate processes running within the particular that non-global operating system partition from other non-global operating system partitions within the global operating system environment, wherein enforcement of boundaries between the non-global operating system partitions is carried out by the operating system, and wherein the plurality of non-global operating system partitions comprises a particular non-global operating system partition;
- instructions for causing one or more processors to associate the particular non-global operating system partition with a first resource pool comprising one or more resources; and
- instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool.

13. (Currently Amended) The machine-readable storage medium of claim 12, wherein the first resource pool comprises one or more processors.

14. (Currently Amended) The machine-readable storage medium of claim 13, wherein the instructions for causing one or more processors to ensure comprises:
instructions for causing one or more processors to assign work from processes running within the particular non-global operating system partition to only the one or more processors in the first resource pool.
15. (Currently Amended) The machine-readable storage medium of claim 12, wherein the first resource pool comprises an indication of a maximum amount of memory that can be consumed.
16. (Currently Amended) The machine-readable storage medium of claim 15, wherein the instructions for causing one or more processors to ensure comprises:
instructions for causing one or more processors to receive, from a particular process running within the particular non-global operating system partition, a memory allocation request;
instructions for causing one or more processors to determine whether granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded; and
instructions for causing one or more processors to grant, in response to a determination that granting the memory allocation request would not cause the maximum amount of memory that can be consumed to be exceeded, the memory allocation request.
17. (Currently Amended) The machine-readable storage medium of claim 16, wherein the instructions for causing one or more processors to ensure further comprises:

instructions for causing one or more processors to deallocate, in response to a determination that granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded, sufficient memory from one or more other processes to enable the memory allocation request to be granted without causing the maximum amount of memory that can be consumed to be exceeded; and instructions for causing one or more processors to grant the memory allocation request.

18. (Currently Amended) The machine-readable storage medium of claim 12, wherein the operating system is executed on a computer system, and wherein the resources in the first resource pool are just a subset of a total set of resources available on the computer system.
19. (Currently Amended) The machine-readable storage medium of claim 12, wherein the instructions for causing one or more processors to ensure comprises:
instructions for causing one or more processors to associate each process running within the particular non-global operating system partition with the first resource pool.
20. (Currently Amended) The machine-readable storage medium of claim 19, further comprising:
instructions for causing one or more processors to receive an indication that the particular non-global operating system partition is to be associated with a second resource pool instead of the first resource pool, wherein the second resource pool is different from the first resource pool, and wherein the second resource pool comprises one or more resources;

instructions for causing one or more processors to associate the particular non-global operating system partition with the second resource pool instead of the first resource pool; and instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool.

21. (Currently Amended) The machine-readable storage medium of claim 20, wherein the instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool comprises:

instructions for causing one or more processors to associate each process running within the particular non-global operating system partition with the second resource pool instead of the first resource pool.

22. (Currently Amended) The machine-readable storage medium of claim 12, wherein the operating system executes on a computer system, and wherein the machine-readable storage medium further comprises:

instructions for causing one or more processors to receive, from a particular process running within the particular non-global operating system partition, a request for information pertaining to all resources; and

instructions for causing one or more processors to provide, to the particular process, information pertaining only to the one or more resources in the first resource pool, even though the computer system comprises other resources.

23. (Currently Amended) An apparatus for implementing at least a portion of an operating system, comprising:

a mechanism for establishing, within a global operating system environment provided by an operating system, a particular non-global partition which a plurality of non-global operating system partitions within a global operating system environment provided by the operating system, wherein each non-global operating system partition serves to isolate processes running within the particular that non-global operating system partition from other non-global operating system partitions within the global operating system environment, wherein enforcement of boundaries between the non-global operating system partitions is carried out by the operating system, and wherein the plurality of non-global operating system partitions comprises a particular non-global operating system partition;

a mechanism for associating the particular non-global operating system partition with a first resource pool comprising one or more resources; and

a mechanism for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool.

24. (Original) The apparatus of claim 23, wherein the first resource pool comprises one or more processors.

25. (Currently Amended) The apparatus of claim 24, wherein the mechanism for ensuring comprises:

a mechanism for assigning work from processes running within the particular non-global operating system partition to only the one or more processors in the first resource pool.

26. (Original) The apparatus of claim 23, wherein the first resource pool comprises an indication of a maximum amount of memory that can be consumed.
27. (Currently Amended) The apparatus of claim 26, wherein the mechanism for ensuring comprises:
 - a mechanism for receiving, from a particular process running within the particular non-global operating system partition, a memory allocation request;
 - a mechanism for determining whether granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded; and
 - a mechanism for granting, in response to a determination that granting the memory allocation request would not cause the maximum amount of memory that can be consumed to be exceeded, the memory allocation request.
28. (Original) The apparatus of claim 27, wherein the mechanism for ensuring further comprises:
 - a mechanism for deallocating, in response to a determination that granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded, sufficient memory from one or more other processes to enable the memory allocation request to be granted without causing the maximum amount of memory that can be consumed to be exceeded; and
 - a mechanism for granting the memory allocation request.

29. (Original) The apparatus of claim 23, wherein the operating system is executed on a computer system, and wherein the resources in the first resource pool are just a subset of a total set of resources available on the computer system.
30. (Currently Amended) The apparatus of claim 23, wherein the mechanism for ensuring comprises:
a mechanism for associating each process running within the particular non-global operating system partition with the first resource pool.
31. (Currently Amended) The apparatus of claim 30, further comprising:
a mechanism for receiving an indication that the particular non-global operating system partition is to be associated with a second resource pool instead of the first resource pool, wherein the second resource pool is different from the first resource pool, and wherein the second resource pool comprises one or more resources;
a mechanism for associating the particular non-global operating system partition with the second resource pool instead of the first resource pool; and
a mechanism for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool.
32. (Currently Amended) The apparatus of claim 31, wherein the mechanism for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool comprises:
a mechanism for associating each process running within the particular non-global operating system partition with the second resource pool instead of the first resource pool.

33. (Currently Amended) The apparatus of claim 23, wherein the operating system executes on a computer system, and wherein the apparatus further comprises:
a mechanism for receiving, from a particular process running within the particular non-global operating system partition, a request for information pertaining to all resources; and
a mechanism for providing, to the particular process, information pertaining only to the one or more resources in the first resource pool, even though the computer system comprises other resources.